

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-13 (Canceled).

14. (Currently Amended) A wafer boat for holding a semiconductor wafer during wafer processing at elevated temperatures, the wafer boat comprising:

a first end and a second end;

a plurality of slots positioned between the first and the second ends for receiving semiconductor wafers therein, each of the plurality of slots comprising first and second upper support guides to maintain the semiconductor wafers in a vertical orientation; and

a lower grooved portion ~~upon which a portion of~~ for supporting the wafers ~~will be in contact, and which will support the wafer when the wafer is positioned thereon,~~ the wafer boat having an inner radius originating from a centerpoint, the slots extending generally along an arc having a radius of curvature corresponding to the inner radius, wherein the lower grooved portion has a generally arcuate and concave contour as viewed from the centerpoint, ~~and wherein at semiconductor processing temperatures of between approximately 1000 °C to 1400 °C, the lower portion substantially conforms to the portion of the wafer supported thereon.~~

15. (Previously Presented) The wafer boat of claim 14, where the wafer boat comprises silicon carbide.

16. (Previously Presented) The wafer boat of claim 15, wherein the silicon carbide is recrystallized silicon carbide.

Claims 17-19 (Canceled).

20. (Previously Presented) The wafer boat of claim 14, wherein the plurality of slots between the first and second ends of said boat are configured to support up to 25 semiconductor wafers.

21. (Previously Presented) The wafer boat of claim 14, wherein the wafer boat has a thickness of not less than 5 mm.

Claims 22-23 (Canceled).

24. (New) A wafer boat for holding a semiconductor wafer during wafer processing at elevated temperatures, the wafer boat comprising:

a first end and a second end;

a plurality of slots spaced apart from each other at a constant spacing, the plurality of slots being positioned between the first and the second ends for receiving semiconductor wafers therein spaced apart from each other at the constant spacing, each of the plurality of slots comprising first and second upper support guides to maintain the semiconductor wafers in a vertical orientation; and

a lower grooved portion for supporting the wafers, the wafer boat having an inner radius originating from a centerpoint, the slots extending generally along an arc having a radius of curvature corresponding to the inner radius, wherein the lower grooved portion has a generally arcuate and concave contour as viewed from the centerpoint.

25. (New) The wafer boat of claim 24, where the wafer boat comprises silicon carbide.

26. (New) The wafer boat of claim 25, wherein the silicon carbide is recrystallized silicon carbide.

27. (New) A wafer boat combination comprising a wafer boat and a plurality of a semiconductor wafers, the wafer boat comprising:

a first end and a second end;

a plurality of slots positioned between the first and the second ends, the semiconductor wafers being respectively received in the plurality of slots, each of the plurality of slots comprising first and second upper support guides to maintain the semiconductor wafers in a vertical orientation; and

a lower grooved portion for supporting a plurality of wafers, the wafer boat having an inner radius originating from a centerpoint, the slots extending generally along an arc having a radius of curvature corresponding to the inner radius, wherein the lower grooved portion has a generally arcuate and concave contour as viewed from the centerpoint, and wherein at semiconductor processing temperatures of between approximately 1000 °C to 1400° C, the lower grooved portion substantially conforms to the portion of the wafer supported thereon.

28. (New) The wafer boat combination of claim 27, wherein the wafer boat comprises silicon carbide.

29. (New) The wafer boat combination of claim 28, wherein the silicon carbide is recrystallized silicon carbide.

30. (New) The wafer boat combination of claim 27, wherein semiconductor wafers have a diameter of about 300 mm.

31. (New) The wafer boat combination of claim 27, wherein an angle α in the range of 10-80 degrees is defined between (i) a first radius of a wafer of the plurality of wafers extending from the center of said wafer to the periphery of said wafer proximate the first upper guides, and (ii) a second radius extending vertically downward from the center of said wafer to a point on the periphery of the wafer which corresponds to the center of the lower portion.

32. (New) The wafer boat combination of claim 31, wherein the angle α is approximately 37 degrees.

33. (New) The wafer boat combination of claim 27, wherein the plurality of slots between the first and second ends of said boat are configured to support up to 25 semiconductor wafers.

34. (New) The wafer boat combination of claim 27, wherein the wafer boat has a thickness of not less than 5 mm.

35. (New) The wafer boat combination of claim 27, wherein the plurality of slots are spaced apart from each other at a constant spacing, such that the plurality of wafers are spaced apart from each other at said constant spacing.